Food Safety vs. Food Security

Food security focuses on the prevention of the intentional introduction of dangerous substances into food. Food safety on the other hand involves preventing the accidental contamination of food or growth of harmful microorganisms during production, processing, storage, distribution and preparation to ensure it remains safe, wholesome and fit for human consumption.

Although both are necessary for public health, they require different expertise and experiences along with varying management and prevention methods. In food safety we use the acronym FATTOM to describe the factors involved in food safety.

- \circ F Foods (i.e. high protein)
- \circ A Acidity (pH)
- \circ T Time (4 hrs in temperature danger zone)
- o T Temperature (avoid temp. danger zone of 40°F 140°F)
- O- Oxygen aerobic, anaerobic and facultative
- M Moisture (water activity)

In food security we need to look at the 3 Ps:

- o Personnel increase screening and supervising of personnel
- $\circ\quad$ Product increase controls to access during production and distribution
- O Property Increase the barriers to intruders, the 3 L's
 - Light it
 - Lock it
 - Limit access

Food producers, processors, transporters, retailers and foodservice facilities should be concerned with the following 7 (seven) areas:

- 1. Assignment of personnel for overall security
- 2. Physical facility, to include entrance of

visitors, hazardous chemical storage and overall physical security of facility.

- 3. Employees, meaning pre-hiring screening, identification badges and restricted access within the facility
- 4. Computer systems, such as restricted access to system-wide programs
- 5. Raw materials and food products, meaning the inspection of incoming products for tampering, approved sources and compliance with the Berry Amendment
 - 6. Operations, including security of water and air supply.
- 7. Finished product security, including the monitoring of foods on display.

There should always be an SOP in place that provides guidance for reporting and responding to any possible tampering of food products or materials. All installation food management personnel should become familiar with TG 188, U.S. Army Food and Water Vulnerability Assessment Guide, February 2002. The Assistant Chief of Staff for Installation Management has mandated implementation of food security measures on installations.

TRAINING HIGHLIGHTS

- * Food Safety and Protection Certification Course is available through the QMC & S, at www.quartermaster.army.mil/dl/fspcc
 - o 40 credit hour class completely on line
 - o Given 6 months to complete
 - o Must pass end of course exam with a grade of 75%
- * The Veterans Administration now pays for the Certified Food Executive and the Certified Professional Food Managers courses.
 - o Check eligibility at www.ifsea.com/VAreimbursement.htm

TB MED 530 (2002) INTERNAL FOOD TEMPERATURE HIGHLIGHTS

- TB MED 530, dtd 30 Oct 02 can be downloaded from http://chppm-www.apgea.army.mil
- Refrigeration temperature for PHFs reduced to 40°F.
- New 2 stage cooling method (1) 140°F to 70°F within 2 hrs and (2) 70°F to 40°F within 4 hrs.
- Cooking requirement for whole beef and corned beef roasts is now 145°F for 3 min.
- Cooking requirement for injected meats and bulk prep eggs is now 155°F for 15 sec.
- All foods cooked in the field must be heated to a temperature of 165°F for 15 sec.

REALITY CHECK Foodborne Outbreaks Happen

November 2002, Afghanistan

- Approximately 100 soldiers suffered nausea, diarrhea and vomiting presumably from consuming undercooked turkey stuffing prepared for their Thanksgiving dinner.
- Suspected reason for illness was improper cooking and handling procedures.

December 2002, Kuwait

- 169 U.S. military personnel treated for gastrointestinal illness.
- Suspected cause was improper handling and/or sanitation of cooking utensils.

									1			
		2					3					
											4	
		5	6									
	7				8			•				
			9						_			
								10				
11												
DOWN (answers in next edition)												
Keep food from bacteria												
	2. Keep hot foods .											
	3 food to destroy bacteria											
	4. Food thermometers are used to take food's											
	6. Cook a to 155°F for 15 sec.											
	7.	7. You can't see, smell or taste them										
	8. Not cooking food thoroughly can make you											
	10. 40°F - 140°F is called the temperature zone											
ACROSS												
	5. Use ice method to calibrate your											
	9. Bring soups to a to ensure food safety											
	11. Stir foods well when heated in a											